MEMORANDUM

TO: Board of Environmental Protection

FROM: Jeffrey S. Crawford, Bureau of Air Quality

DATE: June 18, 2009

RE: State Implementation Plan (SIP) Submittals- RACT Certification.

Statutory and Regulatory Reference:

A. Statutory authority.

38 MRSA Section 585-A provides that the Board of Environmental Protection "may establish and amend regulations to implement ambient air quality standards and emission standards. These regulations shall be designed to achieve and maintain ambient air quality standards and emission standards within any region and prevent air pollution."

Section 107(a) of the 1990 Clean Air Act Amendments (CAA) provides that "Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national ambient primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State."

B. Specific legal mandates requiring adoption.

Section 182 of the CAA sets forth two separate Reasonably Available Control Technology (RACT) requirements for ozone nonattainment areas. The first requirement, contained in section 182(a)(A) of the CAA, and referred to as RACT fix-up, requires the correction of RACT rules for which EPA identified deficiencies before the CAA was amended in 1990. Maine has no deficiencies to correct under this section of the CAA. The second requirement, set forth in Section 182(b)(2) of the CAA, applies to moderate or worse ozone nonattainment areas as well as to marginal and attainment areas in Ozone Transport Regions established pursuant to Section 184 of the CAA, and requires these nonattainment areas to implement RACT controls on all major VOC and NOx emission sources

and on all sources and source categories covered by a Control Technique Guideline document issued by EPA.

Location/Applicability:

The proposed SIP amendments apply statewide.

Description:

RACT is defined as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT requirements are included in the CAA to assure that significant source categories at major sources of ozone precursor emissions (VOV and NOx) are controlled to a "reasonable" extent, but not necessarily to the more stringent Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) levels expected of new sources. According to EPA's Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard (70 FR 71612, November 29, 2005) areas classified as "moderate" nonattainment or higher must submit a demonstration that their current rules fulfill 8-hour ozone RACT requirements for all Control Technique Guideline (CTG) categories and all major, non-CTG sources as a revision to their State Implementation Plans (SIPs). This demonstration can be made with either a new RACT determination or a certification that previously-required RACT controls represent RACT for the 1997 8-hour ozone standard.

The certification process began with the Department's staff reviewing the federal and state requirements, including CTGs, Available Control Technology (ACT) documents, federal Standards of Performance for New Stationary Sources (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Maximum Available Control Technology (MACT) for the applicable source categories. Each regulation adopted by the Department has been evaluated against applicable CTGs and ACTs, and found to fulfill RACT for all applicable source categories with the exception of asphalt paving¹.

Maine determined that its previous asphalt paving regulations no longer constituted RACT under the 8-hour ozone standard. During its review of additional control measures that states should consider adopting as part of the OTC regional 8-hour ozone attainment strategy, the Ozone Transport Commission identified asphalt paving as a category where further VOC emission reductions could be achieved. After reviewing the OTC model rule, along with regulations in other northeastern states, Maine has is proposing to amend its Chapter 131 Cutback and Emulsified Asphalt rule to limit the VOC content of cutback and emulsified asphalt, eliminate exempted uses of cutback asphalt, and extend the scope of the regulation to all asphalt paving activities².

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¹ The Department identified 35 source categories for which EPA issued a CTG prior to November 29, 2005 and for which determinations of RACT with respect to the 1997 ozone standard were required to be included in this SIP revision. Of these 35 CTG categories, Maine has identified applicable sources in 19. There are no existing sources for the remaining 16 CTG source categories, and the Department is reaffirming its negative declaration for these categories.

² This action is a separate rulemaking with a public hearing scheduled for June 18, 2009.

The CAA also requires RACT be applied to any major existing stationary source with the potential to emit 50 tons or greater per year of VOC or 100 tons or greater of NOx in the Ozone Transport Region. Maine's Chapter 134 Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds (VOC RACT) rule applies to all Maine sources with potential VOC emissions of 40 tpy that are not regulated specific regulation³, while the Chapter 138 Reasonably Available Technology For Facilities that Emit Nitrogen Oxides (NOx RACT) rule applies to all Maine sources with potential NOx emissions of 100 tpy that are not located within the region subject to the section 182(f) NOx waiver.

After reviewing all existing major stationary sources of VOC and NOx, the Department determined that although all major sources in Maine are meeting the RACT requirements, the McCain Foods USA, Inc. Tatermeal Facility VOC RACT determination⁴ was never submitted to EPA for inclusion in the SIP. The Department is therefore including this Air Emission License (#A-459-71-D-A) in this proposal.

Environmental Issues:

Ground level ozone is responsible for exacerbating a variety of respiratory ailments, such as asthma. Although children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to ambient ozone while engaged in activity that involves physical exertion. Though these symptoms are often temporary, repeated exposure could result in permanent lung damage.

Departmental Recommendation:

The Department recommends that the Board post the proposed SIP amendments to a 30-day public comment period with opportunity to request a public hearing.

Estimated Time of Presentation:

15 minutes.

³ Specific processes at these facilities may be covered by a CTG.